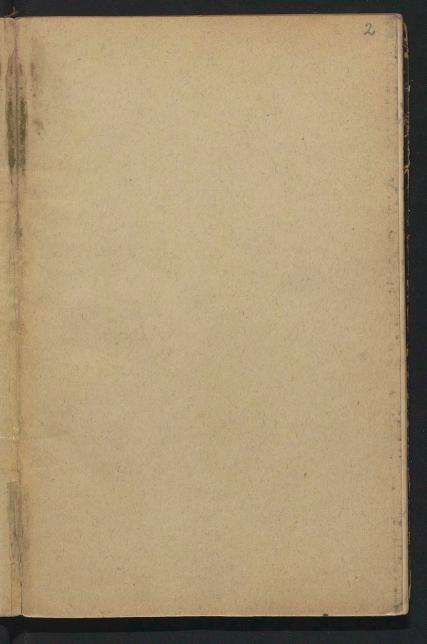
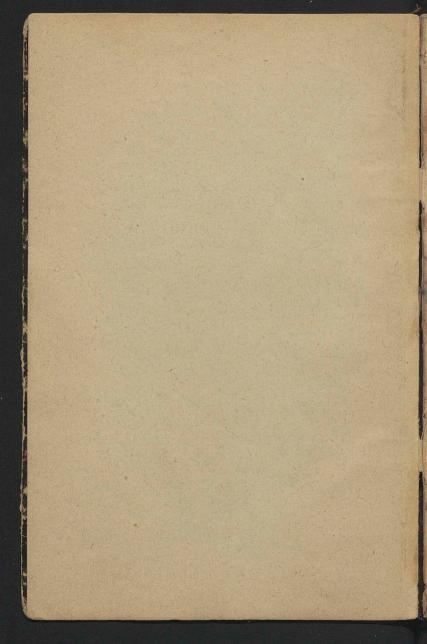
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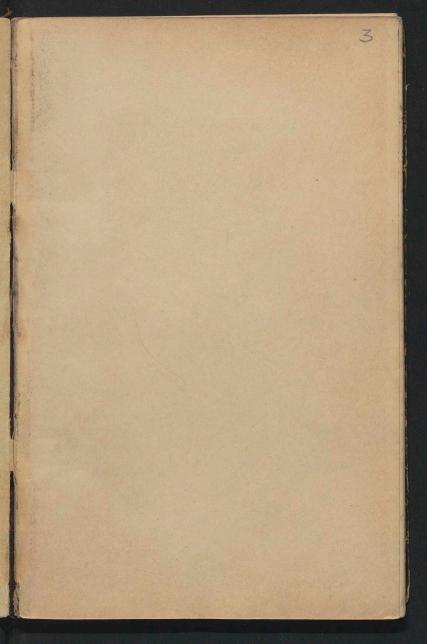
Dr. Josef Stefan A 1 Ausgewählte Capitel aus der Optik um Wärmelehre.

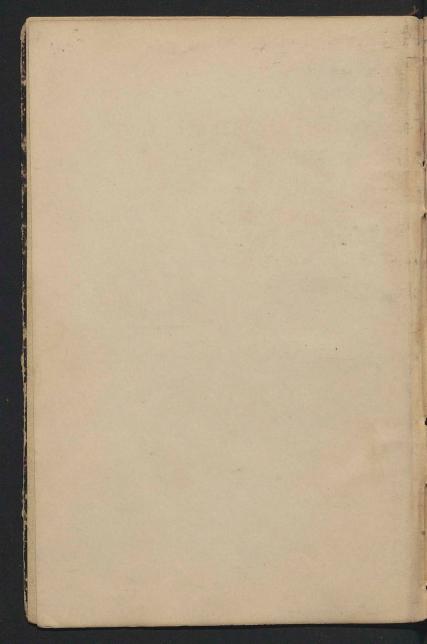
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as en 1 48 f2 2 o Sight is er de jes 112 Contry. og < 40 92 mg Van He REMERONS (W) 1=c't = = [075-0M] t= 03-0M n=013-014

(x-a)2+(y-h)2= n2(h-Varthz)2 [eboud, m=1 (x-a) + (y-h') 2 = m2 (d-la+h12) 2 f - moe h'= h+ dh 25 & elm a 3/ Preff. p = 1 (x-2) 2+(y-h) 2= p2(b-Varthy)2 B (x-a) + (y-h') = m2(l-Va+h/2)2 M f(x, h) A f(x, L!) $\frac{f(x,\lambda')-f(x,\lambda)}{\lambda'-\lambda} = \frac{\Im f}{\Im \lambda}$ in L diff -2(y-h) 2-2/2 (b-Va+h2) 18h y-h=n2(b-1/h+n2)h asoDan (x-a) + (y-h) = m (b- Varxhi) 2 y-h = n = (b - Vark)h y-h/2 = 12+h2

MS+(1-a) 4/19-2)2 1 50 2 MS= eZMSILQ 8. sing = ntsin & 0M = 00 G sin/s= proised sings = c sind sings = = } like (y-h) = much - min 25 470 2 ctimey. pereflica pol: y= the y'(a+h)=lh2 · h = ay Varthe = lh = ab y Ver-y2 a-d,2+(g-ay)2= (b-at-y2)225 englion · b2 (1- a y2) 2- y2 (1- a y2) 2 = (x-a)2 (12-y2) (1- 0)2= (VB--y2-a)2= x-a = = (180-y2-A) x-a = 10= y = -a x = 182-y2 xxxy 2 82 25 2 06 2/2 R. OB y low and y g in the for elem Con af ight of iss Polla cont. x-a = - 102-y2+a x-2a = - 10-y2 (x-2a)2+ y2=12 25 mar 2+2a20+0! 2 refl. 6 = 7, 6 < 1 6 0 0 8 per 8 47 per 847 per. 810 m 9/2 1 1/10 12/20mpl.

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x +2 (a+1-x) 2 2 -2/2 = a2 x2+y2+ p y2 - 2yp = 22 x/a+p-x)+y-(a+x)= a-(a+p-x) x (a-x) + y = (a-x) - a = (a-x) = (a - x) p = 0 01-X=0 x=b renes for VANTO (x2+y2-a2+- / a-n=0 22/4 (x-a) = 0 (x-12)2+y2-(a+12)2=0 clyetie R* at 12 clyetin FN= CN = a+ 12 etaensellaenerge. F A Pure Prefl. an pol) - Brufa vos iby of oppholowing fatoEsse 5 Vas to Cu Eno 1 f P 182 (80: a=0 20 R= /2 personetre 172; a eReal

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$$\frac{2n}{v}(t-\frac{A}{v})=y \quad \xi=a\sin\varphi\sin(\varphi-\xi)$$

- Ellopse We Ma V sande you for So Yellyn july a ve & fry 211 25 gds. posse i a Malyon en se or on to. Aftro- I do I; no No ellyto pot 2. 203.9=450 (b) E, 5- E) = a2 fant E- 5 2 m E tg 4=1 sing= = = co25.52 2 f fax 2 + f2 ar in 2 - Sino 3 co 29 = 1/2 {24 } 2 2 5 co 2 = 32 sin 2 athefolder= The 3th 5th sin E=# {2+ {2= 2 fre - sh = flyd. 2, mt

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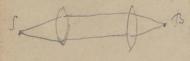
horrore Ool to 6 E= 200 {= a sing sing { {= a cog sing E = typ page ge Ge f y 1/2 pe /2. ofer you of the way of n.3n.5n2n 4m 6m ens 2.000 an 0/ 2); $\Sigma = \frac{2n}{7} \left(\frac{\Delta}{0} - \frac{\Delta}{e} \right)$ $\mathcal{E} = \frac{2\pi\Delta}{c\tau} \left(\frac{c}{o} - \frac{c}{e} \right) = \frac{2\pi\Delta}{\lambda} \left(n_o - n_e \right)$ an Usel $\xi = \frac{\pi}{2} = \frac{2\pi A}{\lambda} \left(n_0 - n_e \right)$ A = 2 1 no-ne <1 UK 5K ~ ~ 0 & ga/8"; V G. 2/2 ? 2-16- 9 2 3 1 Ra + 5 x 1 Va option aughe color & sofue of a en ex gla to aly egg 5 f con 2 / 2 WE 8" U 311 2

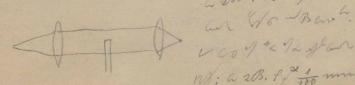
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{= a sin q sin (4 - 5) 5= a company P. 8 5 9 81. of No. Spor funy-tomp a sing cop [sing - E) - sing] an set sin a to the of a seo [is bury] E= 2n en 60 9 poin. 6 2= 12, 3n, 5n, 2 2 4n cold El er 6 2 d 1 a 20 E= 2 Nr eng 1= 1 N no-ne $\varepsilon = \frac{2n}{c} \Delta \left(\frac{1-e}{e} \right) = \pm 2 N\pi$ A (no-me) = ± N ton 1 homes 1 50 VICO CO 9 6 18 4 6 5 0 0 7/ em ; o 6 0 1 h Spectr. 1 8 p. of few 5 2000 ~ 1 60 0 1. 61 6000 m/ - 8 d No 00.01, afm/ eg/ 196 91/20/12; Ry, 00~ cm G-; A/102 6 moth g. 61665 700 gle 100. with to the world a enough 12 gray 1. 000; - 14/1,0 Nex- usfo to The a v comple of ; fiffer of sof; 5 - en, a < f 2 1 19 comple "6 y Eus co; di 1 Je & ca 9, 10 Lenes son. 4/87/E ms co

12/5 100 / a 11 of 9 1 1 90 6 + 0 A 19 5 pel-28 e py 1/2/6 Jack Mr. 69 hr 16 W Para 2 -8 9 week of 6; 8< 6 8/3/16 ares (60 - vo fax x x 9 1. /10 6 ~ / = 0 n c = 0 1 / 101 2002 60 - comp. 10 1 5 8 8 cm 203.00_ Nocol. Prad LANA Tole 71166 d B-B18

$$\frac{29}{u} - \frac{33}{c} = 9$$





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16 mgs. 100 and Roth 200, Willet ous la / oh ello 2 ft o 6 00 9 11; 8 < 6 2 1 D ~ Orome 12 10; & 18 2 ~ fr cofferences vo = 27 [/2-02 sinta - asa] d= 1 (20 wells) slots not ell of "nel D= letters = and = let (as sin - as a) = = et (aina cos) + gt (aina - cox) ty d= o soina De= EF (Voz-er sonia - cosa) Bo- Be= 45 [Voz-osmin - Voz-ezmin] 6- 0 = 97 c [1-02 sind - 1 + 202 sind = = 4 f [e2-02] sind

PERMENTELS Vald 82600 05 611 3/12 G= a sin 2nt 6= 6 sing 6= 6 cop Go = a sin p sin 2π (t - ε) E. = 6 4 PR KSR 6 = a cosy sin 22 (t - Ex) 00-00 = 20- 5e 2 7 12 AAMP WIN PENANTED NAMED AAR. 6"= 6' cs (4-9) - 60 sin (4-4) 6"= delange aus gas fregent te a sing sing- 4) sin En(t- E) =acry us (4-4) sin 2 (++ E+ E- E) - a sing shoff-4)

2n(t-E) = u 2n (20 - E) = \$5 6"= a co 4 co 4-4) sin (n+0) - a singering y sin u = [a cry cr (4-4) cró- a sin prin(4-4)] sinn t + a cry cr (4-4) sin o cos u A cro v = A cro v sin u + A sin v cos u = A sin (n+v) a eng en (y-y) en 5 - a sing sin (y- \$) = A en v a as q as (4-4) sin t = A sin u A = a comp co (y-4) - 2 a simp in p sin (y-4) in fry ont + a 2 sin 4 sin (4-4) - 2 a cory co (4-4) my sing +2020 g cn (4-4) sin 4 sin (4-4) = = aas y + fa sin 2 p sin 2 (4-4) fin 5 eispil would a A=0 A 19 A = 2 sin 2 q sin 2 2 7 by 10 co pale a Verte Poplar

perone His. 12 ce myelloge of HE. 24 9=450 A= a 2012 5 $\int_{S} \int_{\Xi} \int_{\Xi} \left(\varepsilon_{0} - \varepsilon_{e} \right)$ = 2n (00 - 0e) = 20 EF (Vc2-020min - Vc2-e20min) 2 2 E7 (1-0 sin - 1 = 2 sin a) (an) = 0, n, 2n, 3n, acetan-whi Jen 6 220 0 200, co 1860 36 a f = 9 6 / m addy A=0 for you a 12 ray and 14 c v co 12: ch 2 6 1 40 & 2/2 mm 8 - ex wond Taplan ~ Mili V. no so II nove Rises evides

A2= 2" co y + 2" sin 2 p sin2 (4-4) sin 5 Az az sindy sind yeo An. S Tol. 11 A2 = 22 4 - 2 sin 29 sin 2 A, + A2 = a2 62.60 uggsento 89 placed Dul at Mi con of Manden 1 ". PLE of complem ft. ero Pa con So Sachen 9=0 A2=22 Az ~ Son. a sin 2 - Nexe. " Name - = 0'Appro solding on sind, er solvotuan are. p. 73 - 5 de gorb

} = a sin lot g = e co zort Prant; or Nord- 2 PP e Te vojin. 2 Cmp. 2 mp - 0 P 8 2 E a ein 2nt J= a cos rot {= a sin 2n (t - 20) $\xi = \alpha \cos \frac{2\pi}{\tau} (t - \xi_e) = \alpha \cos \frac{2\pi}{\tau} [t - \xi_o + (\xi_o - \xi_e)]$ 2n(t-e₀) = u 2n (E₀ - εۅ) = o {= a sin u {= a cs (u+0) 6=8cs x + 8sin x G= a cox as (a+ d) + a em y sin u = a asx es of won + (a inx - a do x in d) since A= a as y cost of a sent + a day ain 25 - 2 a single y and = a2 - a2 sin 2y sin 8

a AA hor. of / N=0 2A2 Nag = at co } co & mil X = 900 -11 J= 1 , 5n , 9n sindet sin. a sin2x+ 26 X fo-90 II G. in 2x -vocely~ K. 6 circul /6 2 26 5 28 8 1/4 Undelations glammer I'y - & and Call est est 6 fg gg a a gene chapute 30 40 41 /2 0 sind + - 2 0 00 0 0 00 16 s Reg 1/2 2/m. en regent reprise fore; in quer de grow of sold is en K.

den-un form; enego At done of 26 Hope 2 y or e or In any of you Vez « AA & Pen 15/2 des 9 Wrebs; 20 of NAD; palte R & v esn'no II I colente de 28.24 dar of Nodoch Dio 3 of 2 28 R 83. Pho Che.

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() Fresnell {= a cs ky sin 2n (+ + tu) =

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e el flus profeso - The Ne: Pe 6 & & Solid : Way god ~ P-Dr. PR Dl. of [con 7:5 mm h] 1-9, 8x 1mm h " (de en x 240 0) 7:5mm = 180 1. f ea i p Od. 20 " int. 12 180°; f do 10 10 int. 1; o cer ru 2/2 /1/2 spresens. N (n) ar i Vodo gre 9 s. pl s ~ < 1/2 9 ce 3/2 /2

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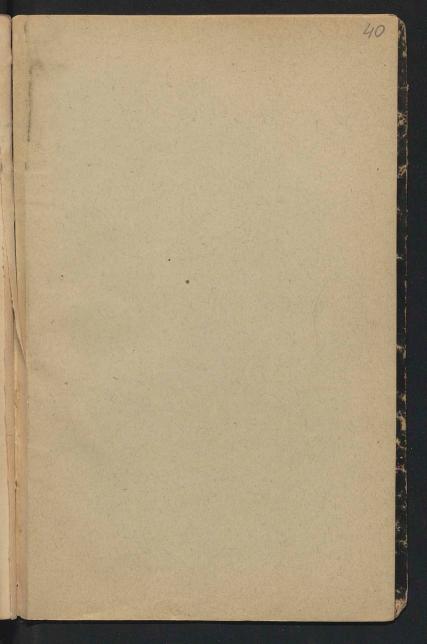
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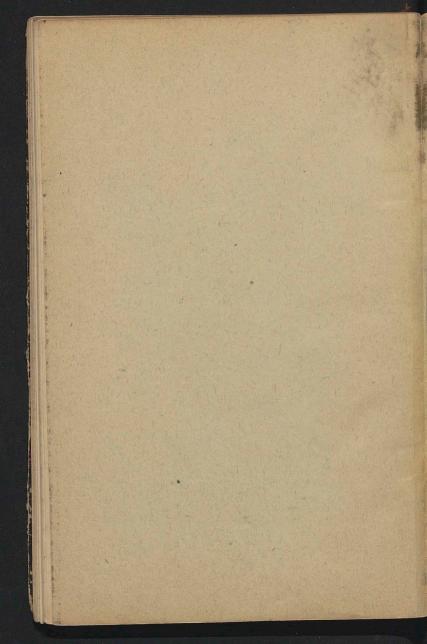
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[x- on + & l]dl+[y-on + am]dm+ k-on + an]dn=0 an w 6 G E & a Lollado $x = \frac{\partial u}{\partial \ell} - \alpha \ell \quad y = \frac{\partial n}{\partial m} - \alpha m \quad 2 = \frac{\partial n}{\partial n} - \alpha n \quad .$ poressyrina, limin den "Hellmin são 3. arenz + (arenz) z u du + m² (arenz) z u du + n² de (cr-nz) z udu ed z frygr+ hz = 1= N2[frant + forun = + forun = 1 armit 1/2 m dn = 0 $\frac{\partial u}{\partial \ell} = -\frac{N^2 \ell}{n(\alpha^2 - n^2)} = -\frac{N \ell}{n}$ $\frac{\partial u}{\partial m} = -\frac{N^2 m}{u(\theta^2 - ur)} = -\frac{Ng}{u}$ Dn = - Nonk = - Wh $l\frac{\partial u}{\partial \ell} + m \frac{\partial u}{\partial m} + n \frac{\partial u}{\partial n} = -\frac{N}{n} \left[f \ell + g m + h n \right]$ $x = \frac{2h}{2\ell} - \alpha \ell \left[y = \frac{2n}{2m} - \alpha m \right] = \frac{2h}{2m} - \alpha n n$ x=-12 1x+ my+n2 = - x = n 2=nutdu x= lu + du y= wh n + du $x = \ln - \frac{Nf}{u} \quad y = mu - \frac{Ng}{u} \quad z = nu - \frac{Nh}{u} \quad | \tilde{ch}$

arfx+bigy+orh2=u[arfl+bigm+orhn]_39 - [[art + 82 2 + 5, 7,] $= uN - \frac{N}{u}u^2 = 0$ xy2 = Com a elyte 32 po Per.; Pr/mean.126+4-12; enter.2mg 6 + 48 /g & O Elash. Dier mullitzh = as x as e Por very engl $fx+gy+hz=-\frac{N}{u}$ P325 25:00: x+y +22= 12= 12+ 10 + t N2 = 12-112 $x = \ln - \frac{N^2 \ell}{n(a^2 - n^2)} = . \ln \left[1 - \frac{n^2 - n^2}{a^2 - n^2} \right] = \ln \frac{a^2 - n^2}{a^2 - n^2}$ = fully = Mlos art this to me = m [arfx+bigg+cx] = 0 = 258 and ARR mill x, y, 2 and the set of the set 125 Fresul 1 & the for solmpire

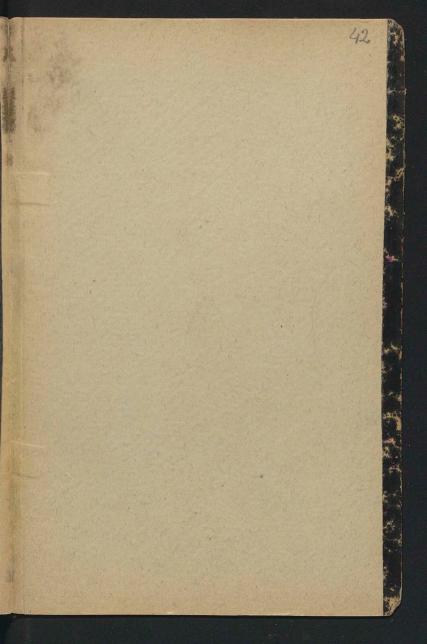
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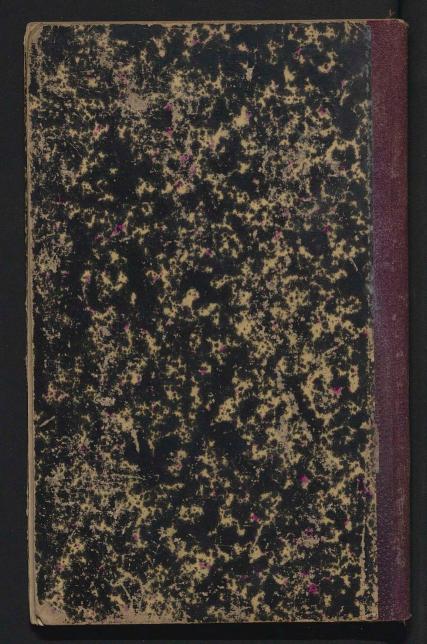




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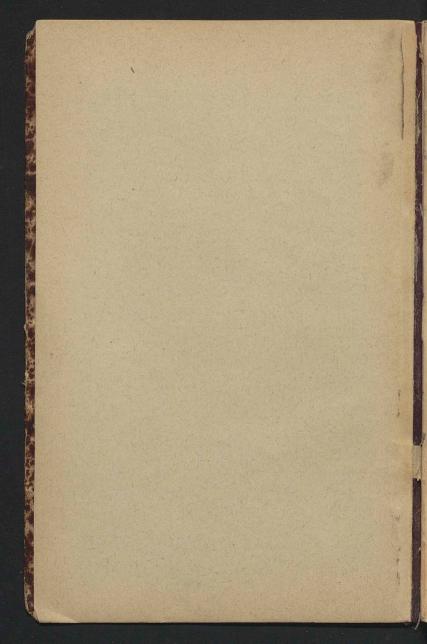


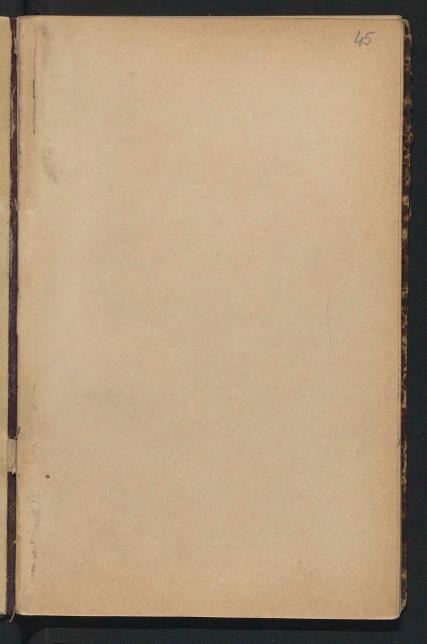


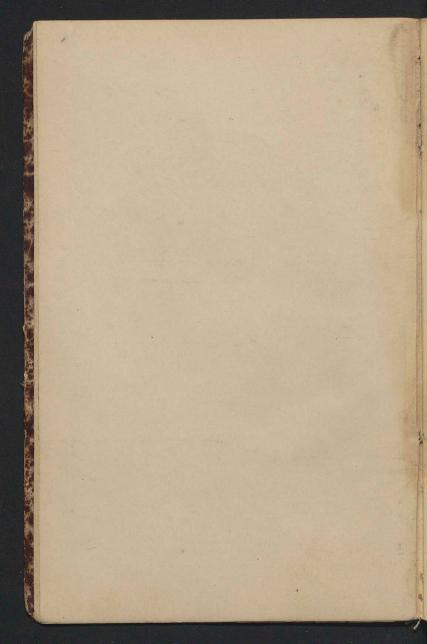
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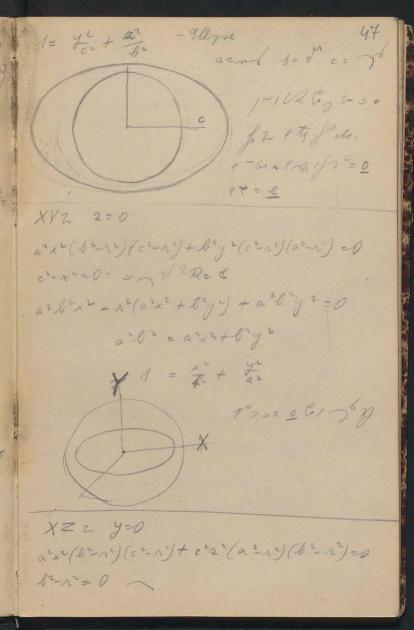






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ar- 1 t by + cize =0 ax2[0:-1][0-1]+by [0-1][0-1]+ez/a-1][8:1] you ash I Ell. ar-red - Chry mar R= a a2x2(c2. x2) + a2y2(c2-12) + c222(a2-12) =0 a c ac (x'ty 2) - n'(a'x'+a'y'+c'2') + a'c'2' のででれるのではなる - - -(a2c2-a2x2-a2y2-c22) 12=0 1 = x2 + 22 + 22 = 75 & Sellyout Huy gh en's she "Ell. proce and tollers on 2 La an 18-1 p & ~ - n s +~ Pill. 2001- 46 x=0 Sign (22 2) (22 22) + 22 2 (22 27) (22 2) 20 a-neo o- elgin = nea by (c2-1) + c22 (b2-1) =0 12c2 (y2+2) - 12 by2 - c22220 8-c2 - 82y2 - c22200



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rgopellagn fre gen; galley; who B. - Ply and Is = /e of Del De ~ Mas Do for Boshe; - of of y & Say - Zussac 11 - 5 DIN & Toule To the stopping or eripade/ Colone e cont e coffer temp 9; * syleven e/s volin e/on vagtist In ned. 600 / sel en I who has dQ = cdt + all = cd+ dh 1=A = cd+ Add

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povo a el "Bh v or Ande 20 oder 14 sp. 21 van 19208. 1). dQ=cdT+Apdv effers = 16 9. de = cdl + Andr = cdl +AR podr

= c d ly T + ARdly v = d[c logT + AR log v] clyT+ARlyr T= integn J de = d [log(T CN v AR)] = d 2vg (T v C-c) 2). df = (c+AR) dT - A volp de = (+AR) dt - Avdy = (c+AR)dT - ARdy = C oft - (C-c)dp of = d by (Ic-c) I 3). dQ = Endrt crop de = Crdir + crop = Coby + c dr T = pr = d log(r nc) = d lug(v.pc) III

~~ A & vol. 10 20 17 ~ m ~ 2 or fly 53 2 teny xx de= 0 rom who advabatisch d by ter C-c=0 by Tov = the by k Tor Coc = k To, vol To vo =k for of the form of the T = (vo) &-1 & / 14 $a \sim ers g e re Vol. armyr. <math>a := \left(\frac{v_0}{v}\right)^{0.4}$ $v = \frac{v_0}{T_0}$ $T = \frac{v_0}{T_0}$ $T = \frac{v_0}{T_0}$ $T = \frac{v_0}{T_0}$ ~ ~ To= 278 T= 273.73 t= 82° 3549 = 355 -8 t. M. 2 18 10 20 8 15 01 10 000. 1 ~ 8 08.11 °. V Comm. y too 1 st. 2 , 2000°

T = of log(v eps) & radiation (de - 0 0 = d ly(v p) v gc = const. = v, g. $\frac{n^{c}}{p_{i}^{c}} = \frac{v_{i}^{c}}{v^{c}} \qquad \left(\frac{p_{i}^{c}}{p_{i}^{c}}\right)^{\frac{1}{2}} = \left(\frac{v_{i}^{c}}{v_{i}^{c}}\right)^{\frac{1}{2}} =$ 0 2/12 N. 1 = 1 Oal. - 68 14 $v_{g}=1$ $p_{h}=\left(\frac{e}{e}\right)^{\frac{c}{e}}=\left(\frac{e}{e}\right)^{\frac{c}{e}}$ from the grand signs, Cale MI Sue of * role Ak. 75 8 The Pully rold on 9=9. (1+5) 6=20 e M/g fr = (+6) k = 1+ k6 a6m M-1 = k6 RA, 1 = k=1 Jeba Laplace /2

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for I vario of or ego the se to op 66 36. 1. 6 reg. D= 1 - 11. du de de - A o , ee & g co s cy eq o usu'lord v a = v(ap - p) + Const. arregue = u' la a = creque = c C= u' (of - F) + Const. X= C+X(ds-4)(~-u') v= (+x)n/+xn v-u' = x(u-u') x=c+(u-u')x(dx-4)

dv= (1-1) dn' + 2 dn ds+ (mil) de ~[(1-x) dn/+ x dn] dt + /3[(1-x) dn/+ x dn] dv a [dv-(n-n)dx] + s[4-x) dn + x dn]dvoo [a+p(1-x) di the dn] d (= x h-1) de [c+elf x(n-n)-fx(n-n)+13 dn 4 dn 4 +x B du Tol V = x (m n) dx L= B (n-n') for a de [p(n-n')] - x B(n-n') + p dn' de donne fc+x dly-x 4 + B din for = à (n-w) dx 5 cg segar sola ev. 1/00 dv od L= 605.5-0.695 t dl = - 0.695

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oNE ~ you ve say on chat she Randowshing 6.2011 020-875816-~ ony al - 110 of freir Ango ~ Rowtodusk Jo) Cilor en an / Eveligt; most) of Transf. " I'm of e. adT + B aP + APal = dn ad + 1 olp + A Poll + Alolp - Alap adt + sdP = dn - Ad(Pl) ing: da - ds - Adl ~16/60 × 16/37~4 elge a dt + pdy + ydr oll = a dt + boy + c dr dig - Adle = du dy-ds

6-A a) dt + B-Ab) dy + g-Ac) de = du da - A da = ds - Adb da - A da = do - A do at dr - A db = dy - A de da = dp - f dr = df - 4 de = dr = A (dh - da) of = A (de - da) de = de og se le la ~ Cond. x est ung & boy + cd2 ~ ml & esto wif fred /f

26/6 8/ 8 a / Capaller 1, t, v, 5-7 68 500 pro 8 . H Hdg = Vadseldenf is for resposion Pel de= xd++3dv+ydH polo = V rezvasola polv- Holy du = dq - A[pdv-Hdj] = aq - A[pdv- Holg - gdH+gdH] du + A d(gH) = dq - Apolor - Agal H = 2017 + (3 - Ap) dw + (4 - Ag) dH or of - Adr = de - Ady - who & de = ds : ds = dr de = de g= (24)2nn [e Nenoslas es 21 nos 18] dg= 2nrde [de 16 ep son] 10 * dred talk

x1.19 (-x) co マニ (ヤメ) ルノナ えい $(1-x)u^{1} = nx^{2} + nx^{3} - 2nx^{3}$ -u'dx = nrids e corre Temps dg = - 2n'dx dr= (u-u') dx vsH variable aradam de - 2n' off = 2w of the (u-w) n you H. Joga T. n= - 200 H + with 1 = 00 peansh = & & 2,0 is capille as & my State 2 compa $\lambda = \frac{2A}{sn}$ $s = \frac{1}{n}$ = 2w H dy - Eg ally N=- to + court 1 = sp. 1 00 = 6 2- 15 + work 46= 1 og & frough

e co word & lague de fre - / ne of ef an) -/(~ t. = HdO . te and cosses a centa all=adT+ solv+ydH dn=dl-Apdr+AHdO-BOdH+BOdH Eredoux the du + Ad(DH) = oil-Apolo + ADaH dr = do 00 (R 4 10 xd 56 3 - 0 UPV) 0=4712 do=8ards - u'de = 47 roh (1-x) u1 = 4223 dr= - whire v= とメルナ×ル do=- 2wdx dr= (u-n') du the " (n-w)n

dh = 2u' at = (u-u)p p= 201H + cont odreepe, ~ Godes Jeno; saen in de con God, no you so a De co & ce por it et us ming. fog was 24 4 co No of = adT + sob + yd 9 - as inday of 8 100 ; 25 8 2 0 voe als s · 1501- 4 Ne カーカルマ n= s $dn = \frac{ds}{n} - \frac{2s}{n} dr$ 108 el ne eleptio 14l E = Shote W dl=adt+Bohr tydE areng - m Vd fofto or / god Cotased = E = W d N= 200 de no Tobale R. Or du = dl + Apolo + 22 Adr + A 9019 +A d A (20)

du + Ad(2) = dq-Apolo + A 9d2 $\frac{dh}{dq} = -\frac{d\left(\frac{q}{q}\right)}{dr} = \frac{q}{r^2} \frac{dr}{dr}$ (1-x) w = 4 nr3 4nnodr = - Wolx do = (u-n') de dr = - " 4nr (u-u') h= - 22 " + anst const. = & a 2/2/21. 1.1 2 Pg ogg se El coro o ma es 8 releters. as set & election of Dyreys - ; 3+6 5 er of every dip to read Ing) of go \$ 16. (1) 100,26 Dosft 2 co che my Johne, : a w Do of o me De vol. e " < n

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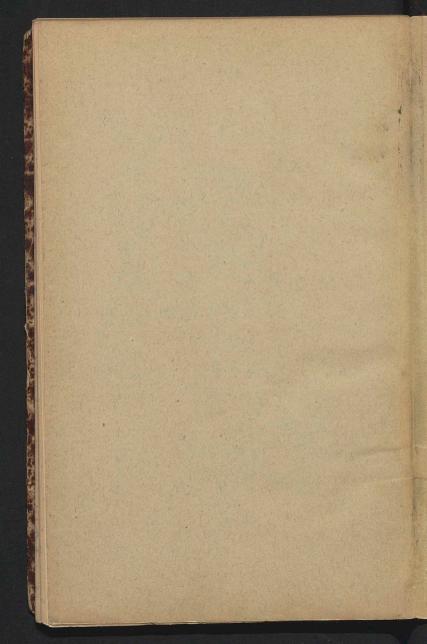
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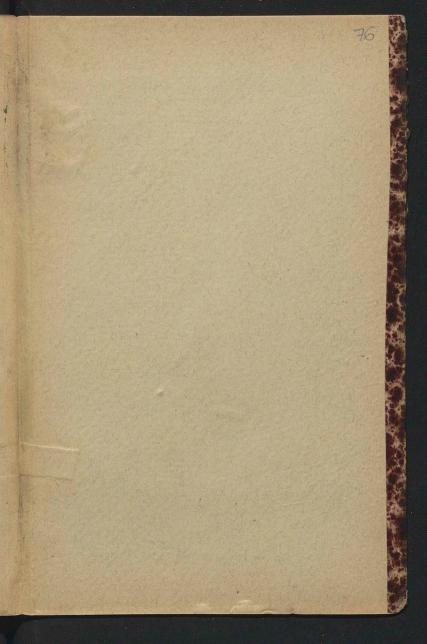
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Dr. Tosef Stefan 77 III., sus gewählte Capital aus der Optik um Wärmelebre.

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F. POLLY, IV. KAROLINENG.23.

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g(x) dx gay q (y) q (2) dx dy dr = F(x+y+12) de dy de ed of cal a so se of shirt x+y+22 90 0 } g /= 40) quy quy y quy = q(x+y+r) q6) q6) 9 x y = Ce - ax 1= C3 = a(x+y+12) dx dy d2 +9 -05+07 1= C3 = a(x+y+12) = c3 = ax dx fe av dy fe on Se de = Va 1= (3(72) 2 1= CFR C= 12 lange " will y Lha Made" all = N(a) = = a (express de dy de

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c graneff; 2g Jerring = Anden 662 JJE-8 6 19 26/00 16. 2/2 val + flagget 1 s& ~ Trime de la Fife Pape 2 Vol 1 n 6 a fr. On n g - n -1-nnr = glenfolo 6/d gode. A def on eld = 4-2 8) (1-28) $\frac{h\xi}{x} \left(1-x\xi\right)^{h} = \left(1-\frac{xx}{h}\right)^{h} = e^{-\alpha x}$ $W_{x+dx} = e^{-\alpha(x+dx)} = e^{-\alpha x} (1 - \alpha dx)$ Wx- Wx+dx = & e dx $\alpha = \frac{1}{\alpha} \times \alpha = 10$ - $\alpha = \frac{1}{\alpha} \times \alpha =$

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=40 Sing port de $=\frac{4c\sin^3\theta}{3} = \frac{4c83}{3}$ 4 Nas2 = + シュなかい us a geld en Ucz myc u $\frac{u_{k}^{2}=c^{2}+c^{2}-2c,c_{2}}{22dd\sin ddd\cdot u}=\frac{1}{2}$ $\frac{1}{4\pi x^{2}}$ $\frac{1}{4\pi x^{2}}$ $= \frac{1}{2c_{1}c_{1}^{2}} \sqrt{(c_{1}^{2} + c_{1}^{2} - 2c_{1}c_{2}c_{3})^{2}} \frac{1}{3}$ $=\frac{1}{6c_{1}c_{2}}\left[c_{1}^{2}+c_{1}^{2}-2c_{1}c_{1}a_{2}d\right]^{\frac{3}{2}}$ $=\frac{1}{6c_{1}c_{2}}\left[c_{1}^{2}+c_{1}^{2}+3c_{1}^{2}-2c_{1}^{2}+3c_{1}^{2}+3c_{1}^{2}-2c_{1}^{2}+3c_{1}^{2}+3c_{1}^{2}-2c_{1}^{2}+3c_{1}^{2}+3c_{1}^{2}-2c_{1}^{2}+3c_{1}^{2}-2c_{1}^{2}+3c_{1}^{2}+3c_{1}^{2}-2c_{1}^{2}+3c_{1}^{2}+3c_{1}^{2}-2c_{1}^{2}+3c_{1}^{2}+3c_{1}^{2}-2c_{1}^{2}+3c_{1}^{2$ $= \frac{6c_1c_1^2 + 2c_1^3}{6c_1c_2} = \frac{6c_1c_1}{4} = \frac{2}{12} C_1$

u=(c,+c) 3 (c,-c) 3 = 2 c13 + 6 c, c2 200 200 voe halozofu tolo

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